

## Mission

1. The [redacted] Division of [redacted] was established in June 1965 and tasked with the responsibility of carrying out research and development in support of intelligence requirements in the behavioral activities area. Behavioral Activities was subsequently established as an Agency R&D subelement. Under this subelement three Agency R&D projects were established: Stress Measurement and Interpretation, Behavioral Control, and Human Factors. In 1970 these R&D projects were revised and increased in number to accommodate the enlarged scope of Divisional activities. These new Agency R&D projects were: Performance Measurement, Assessment and Selection, Human Factors, and Materials Analysis. In 1972 an additional R&D project entitled Narcotics Abuse was added.

2. The term Behavioral Activities is defined as those activities concerned with human performance, reliability, and control. In Agency terms Behavioral Activities addresses problems concerned with personnel security, assessment, health, performance, protection, and control. These problems apply to individuals, groups, and organizations or institutions.

3. [redacted] is addressing these problem areas as follows:

Personnel Security	--	[redacted] Research [redacted] Program
Personnel Assessment	--	Speech Research Monotony/Isolation Research Assessment Validation [redacted] Program [redacted] Program Personality & Behavioral Scales
Personnel Health	--	[redacted] Program [redacted] Program
Personnel Performance	--	Training Research Analytic Models Predictive Models Software Programs
Personnel Protection	--	Materials Analysis Drug Abuse

Personnel Control -- Evoked

Potentials

Foreign Cultures

4. Although is "addressing" the problem areas listed above, there are distinct gaps and omissions in the program. These are:

a. The recently initiated Program cannot be funded beyond FY 72 without serious revisions and cutbacks in other Behavioral Activities programs.

b. The exploration and development of new personality scales has remained essentially stationary because of lack of funds and staff personnel. Partial exceptions have been the and monotonous scales.

c. In the past, training research has yielded positive results. has approached with new requirements. It is expected that these will be formalized and forwarded to The current Behavioral Activities budget does not have funds available for this work.

d. effectiveness in foreign cultures have been on the books for many years. No work has been done in these areas because of lack of funds and personnel. One small effort in is planned for this year. Follow-on funding and personnel are still inadequate.

5. In addition to the above, believes that considerably more work needs to be done in the areas of decision theory, predictive modeling, and operations research. The same is true in the areas of prisoner exploitation, agent assessment and recruitment dynamics, and psychological evaluation of certain foreign groups such as the

6. believes that the Behavioral Activities area needs to be re-evaluated and upgraded in staff and dollars. There are no serious day-to-day problems confronting the Division. Past policy on requirements has been an impediment at times. Hopefully, present policy will correct this barrier to needed research whenever it appears to be arbitrarily applied.

7. Achievements.

a. Established performance levels of the current system.

b. Determined the human factors aspect of a

c. Developed a prototype  
d. Developed an experimental all-electronic instrument.

e. Developed a channel without additional sensor.

f. Developed a prototype monitor capable of detecting signals at distances of 12 to 15 feet.

g. Developed an experimental signals monitor capable of detecting signals at free-space distances of 100 feet plus.

h. A multiple assembly was designed for group interrogation.

i. Conducted a training system survey resulting in an in-house capability to produce program aided (PAI) courses of instruction. Funded a PAI course in Vietnamese language.

j. Delivered the original and many updated versions of the computer package for the medical and social sciences.

k. Funded with a computer model for predicting epidemics of meningitis.

l. Adapted Bayesian analysis strategy to the intelligence analyst's problem of forecasting.

m. Developed a health hazard radiometer for measuring microwave fields.

n. Acquired and developed a large data base on potentially dangerous psychopharmacological agents.

o. Developed a conceptual design for a predictive system.

## HISTORY

The \_\_\_\_\_ Division \_\_\_\_\_ was established in June 1965. The creation of this Division, and the simultaneous establishment of the \_\_\_\_\_ Division \_\_\_\_\_ was brought about as a result of the growing complexity and rapidly expanding diversity of their parent organization, \_\_\_\_\_ The \_\_\_\_\_ existed from 1963 until June 1965. During this time this group initiated a wide variety of priority research tasks which were representative of life science disciplines ranging from human psychology and decision theory to biological sub-systems such as microimmunology and particle physics. Because of this exaggerated diversity, it was believed that a division of life science activities into separate but closely coordinated working groups responsible for behavioral activities and for biological activities would be more efficient and productive. Accordingly the \_\_\_\_\_ Division \_\_\_\_\_ was established and tasked with the primary responsibility of carrying out research and development operations in support of intelligence requirements in the behavioral activities area. Behavioral Activities was therefore established as an Agency Research and Development Sub-element. Under this Sub-element, three Agency R&D Projects were established. These were (a) Stress Measurement and Interpretation, (b) Behavior Control, and (c) Human Factors.

The initial \_\_\_\_\_ Division consisted of a Division Chief, four technical officers and one secretary. Professional disciplines represented were: one Medical Doctor, one Ph.D. Physiologist,

two Ph.D. Psychologists and one Pharmacologist. During the period June 1966 to April 1968 the Pharmacologist resigned, a Ph.D. Physiologist with a background in pharmacology joined the Division staff and one secretary was added bringing the Division complement to seven.

Research projects initiated by the [redacted] and continued by the [redacted] Division were: polygraph program, stress measurement support, baseline stress measurements, vulnerabilities of special behavioral groups, hypnotic susceptibility and biological effects of [redacted]. With the exception of the polygraph and baseline stress measurement studies, these initial projects were subsequently redirected or discontinued. Stress measurement support and biological effects [redacted] were discontinued, the latter responsibility going to the Department of Defense. The vulnerabilities of special behavioral groups effort was redirected to a study of undercover agent characteristics, con men, and provocation, elicitation, interrogation techniques while the hypnotic susceptibility work was redirected to a study of sleep suggestibility. Meanwhile the Stress Measurement Project was expanded to include [redacted] monitoring and the polygraph program was enlarged from [redacted] research contracts. This latter effort was coordinated and directed by a team within [redacted] that performed most of the data analysis and that prepared and published reports of polygraph program developments. The Behavior Control Project was expanded to include a drug acquisition and screening program, exploratory and developmental work on techniques for improved

assessment of individuals and small groups, work on covert provocation and elicitation techniques and new efforts in the area of ethnocultural factors concerned with communication barriers within and between selected cultural groups, national issues and tribal issues among nomads and other minority groups. The Human Factors Project has developed during the period June 1965 to April 1968 to include a co-ordinated multi-task effort to improve [redacted] performance in target detection, to improve [redacted] performance, to improve performance of the Agency training system, to analyse and define the role or transfer functions of the human in the intelligence process and to develop means of optimizing his performance with particular emphasis to date on the intelligence analyst and the decision making process, and to identify and exploit factors influencing learning, memory, and fatigue.

Starting in June 1965 with a budget of [redacted] and a program of [redacted] projects, in April 1968 the [redacted] Division had established [redacted] contracts and [redacted] contracts amounting to [redacted]

In spite of the small size of the [redacted] during this developmental phase its officer personnel were successfully monitoring two projects for other [redacted] Divisions, serving as consultants on three Department of Defense committees, and as consultants to various Agency components or activities. [redacted] personnel, both as a group and as individuals were actively involved in a collaborative effort with other Agency components to identify Agency problems and related requirements. With the Office of [redacted] and [redacted] these relationships centered about the polygraph program and the [redacted]

training systems study, both of which were carried forward with the assistance of outside contractors. With the Office of [redacted] initiated research to identify problems associated with the role of the intelligence analyst. [redacted] initiated work with [redacted] to better define problems associated with assessment of individuals and groups.

As a result of these efforts problems of access and of cooperation between offices based on habits and established practices have been largely overcome. The principal example of progress in this area was the polygraph program jointly undertaken by the [redacted]. This example setting effort, along with the training system survey, has gone a long way toward establishing precedence for future cooperative efforts between [redacted] and other Agency components. It is expected that the current method employed by [redacted] of establishing procedures for the identification of Agency problems will be the first step toward a definition of the various human roles in the intelligence analysis process.

Immediate plans of the [redacted] Division include a moderate growth in personnel and funds to complete the work now under way and to support new work needed in the Stress Measurement, Behavior Control and Human Factors areas. It is also planned to increase the in-house effort with respect to the ongoing analysis of Agency problems. At the same time it is planned to systematize and adapt special analytical techniques, Bayesian, contextual and others to the Agency's peculiar problems and to implement their use as appropriate.

Long range plans call for careful analytical studies and preparations for the probable needs of the Agency in the years to come. If predictors for example indicate that human group behavior is to become increasingly more emotional and violent for the foreseeable future, requirements concerning the struggle for men's minds could change radically. To survive and succeed in a rapidly changing world it may be that the Agency will have to have some means of instant self analysis of any one or more of its various components and a means of quickly instituting changes as needed.

At this point in time a number of accomplishments may be cited as milestones toward the achievement of established goals:

(a) Polygraph program results have yielded findings with respect to polygraph utility, reliability and validity.

(b) Automatic measurement of polygraph signals was accomplished. The method could be used to assist the examiner.

(c) An improved } design was developed and demonstrated.

(d) An improved } sensor was developed. The improved design has yet to be demonstrated as superior in operation.

(e) An improved } sensor is under development.

(f) A } sensor is under development.

(g) The } was shown to be a sensitive indicator of stress.

(h) The } was shown to be a sensitive indicator of "yes" and "no" answers and hence potentially an indicator of deception.

(i) Three new stress indicators, } were investigated and discarded as potential polygraph parameters.



(j) Significant new developments in \_\_\_\_\_ monitoring were identified and redirected for Agency application.

(k) Sleep suggestibility as distinct from hypnotic suggestibility was demonstrated as a phenomenon.

(l) Some characteristics of individuals more successful in resisting \_\_\_\_\_ were identified.

(m) Methods that \_\_\_\_\_ use to identify susceptible targets were studied and classified.

(n) Two first operation health hazard radiometers were developed and deployed to the field.

(o) A dosemetry slide-rule for safe operation of \_\_\_\_\_ was developed and disseminated to users.

(p) Preliminary design specification were developed for a system to determine critical parameters in \_\_\_\_\_ detection of targets.